

BEFORE THE
Federal Communications Commission
WASHINGTON, D.C.

In the Matter of)	
)	
)	
Service Rules for Advanced Wireless Services)	WT Docket No. 07-195
in the 2155-2175 MHz Band)	
)	
Service Rules for Advanced Wireless Services)	WT Docket No. 04-356
in the 1915-1920 MHz, 1995-2000 MHz,)	
2020-2025 MHz and 2175-2180 MHz Bands)	
)	

COMMENTS OF SPECTRUMCO LLC

SpectrumCo LLC
2001 Pennsylvania Avenue, NW
Suite 500
Washington, DC 20006

Philip L. Verveer
Daniel K. Alvarez
WILLKIE FARR & GALLAGHER LLP
1875 K Street, N.W.
Washington, DC 20006-1238

Counsel for SpectrumCo LLC

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COMMENTS OF SPECTRUMCO LLC

SpectrumCo LLC (“SpectrumCo”)¹ hereby responds to the Commission’s Further Notice of Proposed Rulemaking (“Further Notice”) in the above-captioned proceeding.

I. INTRODUCTION & SUMMARY

SpectrumCo is a licensee of AWS-1 spectrum covering most of the United States for which it paid nearly \$2.4 billion. As a result, it has a particular and material interest in the development of appropriate service rules for the adjacent 2155-2180 MHz (“AWS-3”) band. Although the Further Notice raises a very large number of issues about the use of the affected spectrum, SpectrumCo’s comments are limited to the AWS-3 band and to two matters -- interference and roaming -- significant to it and to other AWS-1 licensees. The Further Notice’s

¹ SpectrumCo is a Delaware limited liability company, managed by C Spectrum Investment, LLC, a subsidiary of Comcast Corporation. Class B equity owners of SpectrumCo are C Spectrum Investment, LLC; Time Warner Cable LLC, a subsidiary of Time Warner Cable Inc.; Cox Wireless, Inc., a subsidiary of Cox Enterprises, Inc.; and BHN Spectrum Investments, LLC, a subsidiary of Bright House Networks, LLC. SpectrumCo holds AWS licenses acquired in Auction 66 that give the company a near-nationwide footprint.

proposal for use of the AWS-3 band would cause harmful interference to AWS-1 licensees and their subscribers; the Commission would be better served by allocating the AWS-3 spectrum for downlink transmissions. Moreover, this proceeding highlights the problems with the Commission's existing roaming regulation, and provides an opportunity to potentially mitigate some of the harmful consequences of its recent roaming decision. The Commission should keep both issues in the forefront as it moves forward in this proceeding.

II. THE FURTHER NOTICE PROPOSAL UNNECESSARILY AUTHORIZES USE THAT WILL INTERFERE WITH AWS-1 SERVICE.

The Further Notice proposes to permit the eventual AWS-3 licensee to offer two-way mobile wireless services, allowing uplink transmission adjacent in frequency to the AWS-1 downlink band. This is objectionable on two grounds. First, it will cause harmful interference to AWS-1 Frequency Division Duplex ("FDD") mobile units and, second, other uses of the AWS-3 spectrum would more effectively meet the Commission's objectives of encouraging broadband deployment and fostering competition. If the Commission ultimately adopts its proposal, the effect will be new technical requirements on AWS-1 mobile stations that will increase the cost, decrease the functionality, increase the size, decrease the battery life, and harm global roaming and global harmonization. Sound policy requires that the Commission place the sole responsibility to mitigate these problems upon the eventual AWS-3 licensee.

A. The Evidence Suggests That the Commission's Proposal Will Have A Strong Likelihood of Harmful Interference With AWS-1 Spectrum Uses.

By proposing deployment of two-way service in the AWS-3 band, the Further Notice imposes significant penalties on AWS-1 licensees and their customers by exposing them to the certainty of harmful interference. The worst of the interference will occur in the upper parts of the 2110-2155 MHz AWS-1 band, but SpectrumCo, which principally holds B block AWS-1

spectrum, also will be adversely affected. It and all AWS-1 licensees stand to be harmed because all are part of the same ecosystem:

In the mobile data communications industry, the overall innovation pattern is ... influenced by the presence of network effects and complementarities between the players.... As equipment, applications, and software need to be compatible, technical effects are often present also. Pecuniary network effects exist if the profits of a firm in the mobile industry depend on the activities of other producers, such as equipment manufacturers.²

If interference is permitted to diminish the quality of AWS-1 service for licensees close to the 2155 MHz border, it will diminish the overall consumption of AWS-1 service and the negative consequences will be felt throughout the AWS-1 band. And the damage does not end with the AWS-1 band. If SpectrumCo, T-Mobile, and others using AWS-1 spectrum are to compete, they will have to offer quality comparable to companies using other bands. Degradation of the services dependent upon AWS-1 spectrum will leave them at a competitive disadvantage -- something that is very undesirable in light of current industry structure uncertainties.³

As two of our country's leading communications policy intellectuals have explained, managing interference problems requires striking the proper balance:

On one hand, setting a limit that is too stringent risks forcing the rights holder to reduce power to the point of creating coverage holes, forcing it to adopt a cellular architecture that may not be optimal for a particular service, or forcing it to deploy additional cell sites to provide adequate coverage while staying under the spillover limit. On the other hand, setting limits that are too lenient may impose excessive mitigation costs on the rights holder across the geographic or frequency boundary, including costs associated

² J. Bauer, *Spectrum Management in the Mobile Services Industry*, Quello Center Working Paper 03-04 at 9 (August 1, 2003) available at <http://quello.msu.edu/wp/wp-03-04.pdf>.

³ See Section II.B, *infra*.

with increasing transmitter power to overcome the interference or abandoning service in areas where the interference is excessive.⁴

The problem with the Further Notice's approach is precisely that it is too lenient.

The proposed use of the AWS-3 band will cause harmful interference to AWS-1 mobile devices in the form of receiver overload from adjacent channels and in the form of out-of-band emissions. Although the Further Notice has not sought, nor afforded sufficient time to permit, careful study of the interference problems inherent in the proposal,⁵ the record in this proceeding leaves no doubt that the proposal will create harmful interference.⁶

SpectrumCo's independent assessment of the interference potential is consistent with the technical information other parties have submitted. The mitigation of additional interference mechanisms not normally present in FDD and synchronous Time Division Duplex ("TDD") systems will require several costly measures. It will require the use of guard bands with resulting reductions in spectral efficiency. It will require limitation on power levels to reduce out-of-band emissions with resulting larger, more expensive, and less power-efficient mobiles. And it will require EIRP limits to user stations to prevent overload and place additional linearity requirements to user station receivers that also add cost, increase size, reduce functionality, and increase power consumption.

⁴ D. Hatfield and P. Weiser, *Toward Property Rights in Spectrum: The Difficult Policy Choices Ahead*, Policy Analysis No. 575 at 16 (Aug. 17, 2006) available at <http://www.cato.org/pubs/pas/pa575.pdf>.

⁵ See, e.g., T-Mobile Request for Extension of Time to File Comments, WT Docket No. 07-195 (filed July 1, 2008) ("*T-Mobile Extension Request*").

⁶ See, e.g., Ex Parte of AT&T (filed June 5, 2008); Ex Parte of CTIA-The Wireless Association (filed June 5, 2008); Ex Parte of T-Mobile USA, Inc. (filed June 5, 2008). Unless otherwise indicated, all references to Ex Parte filings, as well as Comments and Reply Comments, refer to filings in WT Docket No. 07-195.

SpectrumCo's technical assessment has concluded that a 15 MHz guard band at 2155-2170 MHz between AWS-1 mobile receivers and AWS-3 mobile transmitters is required to allow even an ideal theoretical band pass filter to have sufficient filter selectivity to protect against mobile-to-mobile overload interference.⁷ In other words, if the Further Notice's proposal were to be adopted, AWS-3 mobile devices should be permitted to uplink only in the 2170-2180 MHz band. Under ideal, although not real world, conditions, this would permit AWS-1 mobile stations receiving at 2110-2155 MHz and AWS-3 mobile stations transmitting at 2170-2180 MHz to operate at 1 meter separation with no more than a 1 dB rise in the noise floor. This is not all that is required, however. The Commission's out-of-band emission requirement for mobile stations transmitting in the 2170-2180 MHz band would need to be set at $103+10\text{LOG}(P)$ for 2110-2155 MHz in order to protect AWS-1 mobile stations from harmful interference. Also, any mobile transmission in the 2170-2180 MHz band should be limited to 20 dBm EIRP to control overload interference.

It is of course true that the extent of the interference problem introduced by the Further Notice's proposal is a function of the extent to which AWS-3 mobile devices penetrate the market. But this simply underscores the irony of the Further Notice's proposal. To the extent that it brings forth a service that enjoys commercial success, the interference problems increase. To the extent it produces a commercial failure, the interference problems decrease or disappear.

⁷ In this regard, it is important to note that in actual deployment filters will perform less well due, inter alia, to physical device limitations, variations in manufacturing quality, temperature changes, and the effects of aging.

B. The Commission's Goals Could be Better Achieved By Allocating the Spectrum For Downlink Transmissions.

It is fundamental that the broader economic effects should be taken into account in the design of specific spectrum allocations:

Evaluation of the spectrum is also relevant for allocation of resources between different applications.... It is important that purely technical considerations are supplemented with economic considerations in such a way that applications with a high value for society are preferred to applications with a lower economic value. An estimation of the economic value of different applications will act as a guideline for this prioritization.⁸

Instead of the Further Notice's proposal, the Commission should allocate the AWS-3 spectrum for downlink transmission from base stations to mobile stations.⁹ There is a clear demand for high speed transmission to mobile units, something demonstrated dramatically, inter alia, by the prices paid for AWS-1 and 700 MHz spectrum. Making the AWS-3 spectrum available for FDD downlink transmissions -- for asymmetric pairing of FDD uplink and downlink bands -- would enable licensees to offer mobile and nomadic services dependent upon very fast download times. This has the added advantages of avoiding interference problems and the costs associated with partially mitigating them and eliminates the need for any waste of spectrum for guard bands.

Moreover, the use of the AWS-3 band for FDD downlinks conforms much more closely to the International Telecommunication Union's IMT-2000 band plan than does the Further

⁸ See, e.g., M. Falch and R. Tadayoni, *Economic versus technical approaches to frequency management*, Telecommunications Policy 28 at 206 (2004) available at <http://www.ictregulationtoolkit.org/en/Publication.2248.html>. See also J. Bauer, *Spectrum Management*, at 5 ("Rational policy ought to go beyond a narrow view of spectrum as a resource market and also consider its broader effects.").

⁹ This alternative and its advantages are documented in the record of this proceeding. See, e.g., Comments of T-Mobile USA, Inc. at 4 (filed Dec. 14, 2007); Reply Comments of T-Mobile USA, Inc. at 3 (filed Jan. 14, 2008).

Notice's proposal.¹⁰ Better alignment with the international allocation would facilitate the availability of lower cost, smaller form factor, higher speed, longer battery life, global handsets capable of being used in the U.S. and around the world. It would, in other words, facilitate the achievement of scale economies on both the supply side and the demand side.

On the other hand, the Further Notice's technical proposals sacrifice the full benefits of scale. This is a function of both international incompatibilities and of interference. Deployment of TDD in the spectrum between 2155 and 2170 MHz will deprive U.S. producers and consumers of the ability to deploy the same network and subscriber equipment used elsewhere in the world. This will impose direct pecuniary penalties on *all* U.S. AWS licensees -- including the eventual AWS-3 licensee -- and their customers as they are required to buy equipment customized for the U.S. market. It also will impose costs on U.S. consumers by preventing their AWS terminal devices from functioning when they are overseas.

C. The Eventual AWS-3 Licensee Should Have The Responsibility of Mitigating Any Harmful Interference.

If the Commission persists in its tentative proposal to permit two-way transmissions in AWS-3 spectrum, the responsibility for the necessary mitigations should be entirely the AWS-3 licensee's. Placing the responsibility unambiguously on the AWS-3 licensee would permit prospective AWS-3 bidders to factor in the cost of compliance and adjust their bids accordingly. In this sense, the AWS-3 spectrum is the superior bearer of the costs that the Further Notice

¹⁰ Int'l Telecomm. Union [ITU], *Frequency arrangements for implementation of the terrestrial component of International Mobile Telecommunications-2000 (IMT 2000) in the bands 806-960 MHz, 1 710-2 025 MHz, 2 110-2 200 MHz and 2 500-2 690 MHz*, Recommendation M.1036-3 (2007), available at <http://www.itu.int/rec/R-REC-M.1036/recommendation.asp?lang=en&parent=R-REC-M.1036-3-200707-I>.

proposal invokes. It would appropriately spread the costs to the entire society in the form of lower auction receipts rather than imposing them on individual AWS-1 licensees.

Imposing the mitigation costs on AWS-1 licensees would be particularly unfair because they were given explicit reason, prior to the auction, to believe that they would not confront TDD interference. In the 2003 AWS Service Rules Report and Order, the Commission denied the request of the TDD Coalition, among others, to allocate 1.7/2.1 GHz spectrum for TDD uses: “We note that if proponents of TDD can *conclusively demonstrate that portions of this spectrum could be used for such transmissions without causing interference to ... other licensees*, we could revisit this issue at a future date.”¹¹ Not only was no such “conclusive demonstration” attempted before or after the AWS-1 auction, the bidders had every reason to be confident that none could be achieved,¹² and there is nothing in the record in this proceeding to suggest otherwise. A reversal at this point would be a particularly repugnant and self-defeating instance of governmental action in light of the AWS-1 licensees’ investment-backed expectations, to the extent of more than \$13 billion. It would reinforce, for no evident reason, the inherent “commitment problem”¹³ that attends frequency auctions.

Avoiding the inherent unfairness of visiting any of the mitigation costs on the AWS-1 licensees and taking advantage of the cost spreading mechanism afforded by the auction would

¹¹ See *Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands*, Report and Order, 18 FCC Rcd 25162 ¶ 46 (2003)(emphasis added).

¹² See Section I A, *supra*.

¹³ The “commitment problem” or “regulatory commitment problem” refers to the practical and legal inability of government officials to make commitments that reliably bind their successors. This constitutes an inherent risk for private entities that rely upon rights defined and distributed by the government. Here, a material reversal of a material term--non-interference--less than two years after the AWS-1 auction would constitute an especially aggravated instance of the failure of a government commitment.

be sufficient reasons for adopting the approach we are proposing. However, assignment of the mitigation costs to the AWS-3 licensee is appropriate for additional reasons as well.

The mitigation requirement simply recognizes the long-standing rights of incumbent licensees to use their frequencies free of harmful interference. It is consistent with sound public policy, with Commission practice recognizing first-in-time primacy, and with the security the Communications Act provides licensees.

With respect to policy, unambiguous establishment of interference-related rights and responsibilities contributes to efficiency in the use of spectrum and in the administration of spectrum rights. It serves to internalize the externalities otherwise created if the AWS-3 auction winner chooses to use its spectrum in a manner that is incompatible with its neighbors' use. If the proposed use is the most valuable, *considering all of the relevant costs including those imposed by harmful interference*, the AWS-3 licensee should be permitted to pursue it as long as it implements effective mitigation or compensation for injured licensees. Whether this is the best use of society's frequency resources -- whether it is efficient -- requires accounting for and effectively dealing with interference-related externalities.

The unambiguous establishment of spectrum rights also will make administration more efficient, as Professor Coase pointed out five decades ago.¹⁴ A clear articulation of the respective rights in frequency licenses facilitates efficient private transactions. The unfortunate consequences of failure to assign rights unambiguously can be seen, for example, in the failure

¹⁴ See Ronald H. Coase, *The Federal Communications Commission*, 2 J.L. & ECON. 1 (1959). For example, Professor Coase explained that "there is no analytical difference between the problem of interference between operators on a single frequency and that of interference between operators on adjacent frequencies. The latter problem, like the former, can be solved by delimiting the rights of operators to transmit signals which interfere, or might potentially interfere, with those of others. Once this is done, it can be left to market transactions to bring an optimum utilization of rights." *Id.* at 27.

of resolution in the 2.3 GHz band dispute between terrestrial Wireless Communications Service licensees and Satellite Digital Audio Radio licensees. The irresolution of rights and responsibilities between and among licensees in the spectrally adjacent services has continued for ten years¹⁵ and has inhibited significantly the development of the terrestrial service.¹⁶

Commission practice has placed the responsibility for protecting existing licensees on later-in-time licensed parties that would use the spectrum in ways that could impair the incumbents' use. This can be seen in reallocation contexts in which newly licensed entities are made responsible for relocating incumbents. Since the Congressional authorization enabling the Commission to employ spectrum auctions, this has often been seen in orders making it clear that winning bidders would bear the cost of relocation and in the codification of, sometimes elaborate, procedures and timetables for relocation.¹⁷

¹⁵ Earlier this month, the satellite licensees met with Commission officials to urge joint testing with terrestrial licensees of interference issues. *Ex Parte of Sirius Satellite Radio Inc. and XM Radio Inc.*, MB Docket No. 07-57 (filed July 2, 2008). Numerous AWS-1 licensees urged the Commission to expend as little as three additional months in testing interference in the 2.1 GHz band in an effort to avoid problems similar to those that have beset the 2.3 GHz WCS service for a decade. *T-Mobile Extension Request* at 5. *See also* Comments of AT&T, (filed July 2, 2008) (supporting T-Mobile extension request); Comments of United States Cellular Corporation, (filed July 2, 2008) (same); Comments of Motorola, Inc., (filed July 3, 2008) (same). The Commission did grant a minimal extension of two weeks. *In the Matter of Service Rules for Advanced Wireless Services in the 2155-2175 MHz Band; Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands*, WT Docket No. 07-195; WT Docket No. 04-356, Order, DA 08-1614 (rel. July 8, 2008).

¹⁶ See, e.g., *Consolidated Request of the WCS Coalition for Limited Waiver of Construction Deadline for 132 WCS Licenses*, Order, 21 FCC Rcd. 14134 (WTB 2006).

¹⁷ *See Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite-Service Use*, Report and Order, 15 FCC Rcd 13430 ¶¶ 76-84 (2000).

It is not only in the context of reallocation that first-in-time primacy is evident, however. It can be seen in the rights afforded incumbents in co-primary situations such as the C-band sharing between satellite and terrestrial licensees.¹⁸ It also can be seen in the obligation of prospective licensees in the point-to-point microwave services to engineer links in a manner that avoids interfering with incumbents.¹⁹

Finally, while there is no doubt that the Commission has the ability to adjust spectrum rights, the Communications Act imposes significant substantive and procedural limitations on the modification of licenses. If that is indeed what the Commission intends here, by allowing the AWS-3 licensee to interfere with AWS-1 licensees, the Commission has grossly failed to meet its statutory requirements. Section 316 permits the Commission to modify a license only after it has determined that the modification will “promote the public interest, convenience and necessity”²⁰ The Commission must provide an affected licensee with notice and a full and fair opportunity to protest the modification.²¹ And, very importantly, the Commission bears both the burden of proceeding with the evidence and the burden of proof if a licensee enters a protest.²² The obvious intent of Section 316 is to afford incumbent licensees with the security that their authorizations will not be impaired unless an overarching public reason is presented and proper procedures have been followed. Neither condition has been met in the case of the Further Notice’s proposal. This provides yet another reason why the obligation to mitigate

¹⁸ 47 C.F.R. § 2.106.

¹⁹ 47 C.F.R. §§ 101.103, 101.105.

²⁰ 47 U.S.C. § 316(a)(1).

²¹ *Id.*

²² 47 U.S.C. § 316(b).

should be placed on the AWS-3 licensee. Any other approach would be unsound as a legal matter.

III. ROAMING SHOULD PLAY A LARGE ROLE IN THE COMMISSION'S CONSIDERATION OF ITS PROPOSALS.

The Further Notice's proposal also highlights an important issue that should play a large role in the Commission's consideration of this proceeding: roaming. As an initial matter, the Commission's proposal highlights some of the problems in the current roaming regime -- the eventual licensee, like SpectrumCo and other licensees with national or near-national footprints, will have *no roaming rights*. At the same time, the Commission has an opportunity to potentially mitigate some of the harmful consequences of its existing roaming regulations by clarifying that the eventual licensee's obligation to provide automatic voice and data roaming as a common carrier service extends both to home market roaming and data roaming. Neither should be far from the Commission's collective mind as it considers how to proceed.

A. The Commission's Proposal Highlights the Problems With the Existing Roaming Regime.

In the recent *Roaming Order and FNPRM*,²³ the Commission clarified that automatic roaming is a common carrier service. However, as SpectrumCo and others have explained, the Commission coupled this important step forward with two steps backward, by creating a home market roaming ("home roaming") exception to the general rule that automatic roaming is a common carrier service, and by failing to clarify that data roaming also is a common carrier

²³ See *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, Report and Order and Further Notice of Proposed Rulemaking*, 22 FCC Rcd 15817 (2007).

service.²⁴ The harmful consequences of these two missteps for licensees such as SpectrumCo are highlighted by the Commission's AWS-3 proposal.

Any potential new entrant that acquires nationwide or near-nationwide spectrum usage rights and that intends to use that spectrum to offer data services has *no automatic roaming rights* under the existing roaming rules. Yet, in this proceeding, as in the AWS-1 and 700 MHz proceedings, the Commission is very explicitly seeking to create a situation where the spectrum can be used by a new entrant to build a nationwide wireless data network.²⁵ As SpectrumCo has explained in other proceedings, incumbent carriers will view any potential new entrant with nationwide ambitions as a significant competitive threat, and the incumbents' incentives to

²⁴ See Petition for Reconsideration of SpectrumCo LLC, WT Dkt. No. 05-265 (filed Oct. 1, 2007) ("*SpectrumCo Petition*").

²⁵ *Id.* at 4-7. In the AWS proceeding, the Commission adopted a revised band plan that "increases the variety of licenses to meet the needs of potential new entrants." See *Service Rules for Advanced Wireless Services In the 1.7 GHz and 2.1 GHz Bands*, Order on Reconsideration, 20 FCC Rcd 14058 ¶ 34 (2005). And in the very recent 700 MHz proceeding, the Commission adopted a band plan that included a large spectrum block specifically designed to encourage entry by a new competitor. See *Service Rules for the 698-746, 747-762 and 777-792 MHz Bands; Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems; Section 68.4(a) of the Commission's Rules Governing Hearing Aid-Compatible Telephones; Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services; Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission's Rules; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band; Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, Declaratory Ruling on Reporting Requirement Under Commission's Part 1 Anti-Collusion Rule*, Second Report and Order, 22 FCC Rcd 15289 ¶ 75 (2007) (noting that "larger spectrum blocks offer important benefits, including *providing sufficient spectrum to support the deployment of new and emerging competitors*") (emphasis added).

degrade the new entrant's service or raise the new entrant's costs by denying automatic roaming agreements or charging unreasonably high prices will increase commensurately.²⁶

Consumers have come to expect the ability to go anywhere and everywhere with their mobile wireless devices, and without roaming rights new entrants cannot offer consumers the mobility they demand.²⁷ The result is a situation where the eventual AWS-3 licensee, or any licensee seeking to offer a nationwide mobile wireless data service, must build out significant portions of its network before it can offer service to a single customer. This will only increase the difficulties faced by any new entrants, and actually will dampen, rather than encourage, the deployment of new broadband networks. While addressing these concerns in a piecemeal fashion, such as adopting the proposals contained below, potentially mitigates some of the problems, the Commission's roaming regime can only be fully fixed by addressing the issues raised in the Petitions for Reconsideration and comments filed by SpectrumCo and other parties in the on-going roaming proceeding.²⁸

B. This Proceeding Presents the Commission With An Opportunity to Potentially Mitigate Some of the Harmful Consequences of Its Recent Roaming Decisions.

The competitive landscape in the CMRS marketplace has changed considerably since the Commission released its original Notice in this proceeding. The changes raise serious questions about whether the workably competitive mobile services industry structure in the U.S. is at risk. Most significantly, AT&T and Verizon Wireless, through their acquisition of significant spectrum holdings in recent auctions and other transactions, increasingly are positioned to

²⁶ See *SpectrumCo Petition* at 9.

²⁷ See Comments of SpectrumCo LLC, WT Dkt No. 05-265, at 7-9 (filed Oct. 29, 2007).

²⁸ See *id.*; *SpectrumCo Petition* at 16.

dominate the mobile wireless business. According to Congressman Markey, the result of the 700 MHz auction is that “two mega-resorts are going up on the beachfront in the form of Verizon [Wireless] and AT&T, solidifying their wireless market and spectrum real estate positions.”²⁹ Through other transactions -- notably AT&T’s acquisition of Aloha³⁰ and Verizon Wireless’ pending acquisition of Alltel³¹ -- the two largest incumbents are taking steps that further solidify their marketplace positions.

It is against this backdrop that potential new entrants, such as SpectrumCo, assess the possibility of offering mobile wireless service. As SpectrumCo has explained, the Commission’s “home roaming” exception creates a situation where the rule requires incumbents to offer roaming in areas where market forces are *most* likely to work, while withdrawing the roaming right in those situations where market forces are *least* likely to work.³² Potential new entrants that seize an opportunity to acquire a nationwide spectrum footprint -- as SpectrumCo did in the

²⁹ Oversight of the Federal Communications Commission -- the 700 MHz Auction, Before the H. Subcomm. on Telecomm. and the Internet of the H. Comm. on Energy and Commerce (Statement of Rep. Edward Markey, Chairman), at http://markey.house.gov/index.php?option=com_content&task=view&id=3319&Itemid=241.

³⁰ *In the Matter of Application of Aloha Spectrum Holdings Company LLC (Assignor) and AT&T Mobility II LLC (Assignee) Seeking FCC Consent For Assignment of Licenses and Authorizations*, Mem. Op. and Order, 23 FCC Rcd 2234 (2008).

³¹ *Verizon Wireless and Atlantis Holdings LLC Seek FCC Consent to Transfer Licenses, Spectrum Manager and De Facto Transfer Leasing Arrangements, and Authorizations, and Request a Declaratory Ruling on Foreign Ownership*, Public Notice, DA 08-1481 (rel. June 25, 2008).

³² *SpectrumCo Petition* at 8.

AWS-1 Auction³³ -- will be unable to avail themselves of the automatic roaming right that the Commission adopted because of this exception.

The continued omission of data roaming from the automatic roaming right is also particularly damaging to potential new entrants such as SpectrumCo. As the next generation of wireless services makes its way to the marketplace, the Commission must ensure that existing wireless providers do not leverage their incumbent positions to raise artificial obstacles to the deployment of new broadband networks. To compete effectively in the wireless space, new entrants must be able to provide nationwide service from the start, and access to data roaming on reasonable and non-discriminatory terms will be a critical component of that ability.

With the AWS-3 spectrum, the Commission has an opportunity to potentially ameliorate, in some small fashion, the unintended consequences of its previous roaming decision. In particular, the Commission should make clear that the eventual AWS-3 licensee, assuming that it is able to construct a network, would have an obligation to provide automatic voice and data roaming as a common carrier service, and that such obligation would extend both to home roaming and data roaming. Although this sort of piecemeal action is not enough to truly address the problems created by the Commission's actions in the roaming proceeding, it is not out of the ordinary for the Commission to impose these kinds of conditions in similar contexts to advance important policy goals, even if only by a few steps.³⁴ Moreover, such a step would be consistent with the Commission's goal of encouraging the deployment of wireless broadband services to all

³³ *Auction of Advanced Wireless Services Licenses Closes; Winning Bidders Announced for Auction No. 66*, Public Notice, 21 FCC Rcd 10521 (2006).

³⁴ *In re Applications of ALLTEL Corporation, Transferor, and Atlantis Holdings LLC, Transferee For Consent To Transfer Control of Licenses, Leases and Authorizations*, Mem. Op. and Order, 22 FCC Rcd 19517 ¶¶ 9, 12 (2007) (imposing conditions related to Alltel's deployment of Phase II E911 capability on Alltel's ability to collect USF funds).

Americans, as it will ensure that all carriers using compatible technology would be able to offer their consumers nationwide service.

IV. CONCLUSION

This proceeding presents the Commission with a significant opportunity to increase the spectrum available for wireless broadband deployment. The Commission can best meet its goals of fostering competition and encouraging the deployment of wireless broadband networks by allocating the AWS-3 spectrum for downlink transmissions and by addressing the shortcomings in its existing roaming rules.

Respectfully Submitted,

/s/ Philip L. Verveer

Philip L. Verveer
Daniel K. Alvarez
WILLKIE FARR & GALLAGHER LLP
1875 K Street, N.W.
Washington, DC 20006-1238

Counsel for SpectrumCo LLC

SpectrumCo LLC
2001 Pennsylvania Avenue, NW
Suite 500
Washington, DC 20006

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